

Application No. 09/435,748

AMENDMENTS TO THE SPECIFICATION

In the Specification

Please substitute the following amended paragraph(s) and/or section(s) (deleted matter is shown by strikethrough and added matter is shown by underlining):

At page 35, lines 13-33, please replace the paragraph with the following. This paragraph was previously amended in the Amendments filed on October 15, 2001 and October 28, 2002.

The conditions to convert crystalline  $\text{VO}_2$  to orthorhombic  $\text{V}_2\text{O}_5$  and 2-D crystalline  $\text{V}_2\text{O}_5$ , and amorphous  $\text{V}_2\text{O}_5$  to orthorhombic  $\text{V}_2\text{O}_5$  and 2-D crystalline  $\text{V}_2\text{O}_5$  are described in copending and commonly assigned U.S. Patent application serial number 08/897,903, now U.S. Patent 5,989,514 to Bi et al., entitled "Processing of Vanadium Oxide Particles With Heat," incorporated herein by reference. Conditions for the removal of carbon coatings from metal oxide nanoparticles is described in U.S. Patent Application Serial No. 09/123,255, now U.S. Patent 6,387,531, entitled "Metal (Silicon) Oxide/Carbon Composite Particles," incorporated herein by reference. The incorporation of lithium from a lithium salt into metal oxide nanoparticles in a heat treatment process is described in copending and commonly assigned U.S. Patent Application Serial No. 09/311,506, now U.S. Patent 6,394,494 to Reitz et al., entitled "Metal Vanadium Oxide Particles," and in copending and commonly assigned U.S. Patent Application Serial No. 09/334,203, now U.S. Patent 6,482,374 to Kumar et al., entitled "Reaction Method For Producing Ternary Particles," both of which are incorporated herein by reference.

Application No. 09/435,748

At page 39, lines 27-32, please replace the paragraph with the following:

Also, nanoscale manganese oxide particles have been formed by laser pyrolysis. The production of these particles is described in copending and commonly assigned U.S. Patent Application Serial No. 09/188,770 now U.S. Patent 6,506,493 to Kumar et al., entitled "Metal Oxide Particles," incorporated herein by reference.

At page 39, line 33 to page 40, line 17, please replace the paragraph with the following. This paragraph was previously amended in the Amendment filed on October 15, 2001.

Furthermore, lithium manganese oxide nanoparticles have been produced by laser pyrolysis along with subsequent heat processing, as described in copending and commonly assigned U.S. Patent Applications Serial No. 09/188,768, now U.S. Patent 6,607,706 to Kumar et al., entitled "Composite Metal Oxide Particles," Serial No. 09/203,414, now U.S. Patent 6,136,287 to Horne et al., entitled "Lithium Manganese Oxides and Batteries," and 09/334,203, now U.S. Patent 6,482,374 to Kumar et al., entitled "Reaction Methods for Producing Ternary Particles," all three of which are incorporated herein by reference. It has been observed that nanoscale lithium manganese oxide particles placed in a cathode of a lithium based battery can cycle reversibly over a larger voltage range than bulk materials. The use of nanoscale lithium manganese oxide particles in lithium based batteries is also described in U.S. Patent 5,807,646 to Iwata et al., entitled "Spinel Type Lithium-Manganese Oxide Material, Process for Preparing the Same and Use Thereof," incorporated herein by reference.

Application No. 09/435,748

At page 57, lines 7-20, please replace the paragraph with the following:

Lithium manganese oxide nanoparticles were produced using laser pyrolysis and subsequent heat treatment, essentially following the procedures described in copending and commonly assigned U.S. Patent Application Serial No. 09/334,203, now U.S. Patent 6,482,374 to Kumar et al., entitled "Reaction Methods for Producing Ternary Particles," incorporated herein by reference. The lithium manganese oxide nanoparticles had an average diameter of about 25 nm and a narrow particle size distribution. The particle size distribution of the lithium manganese oxide nanoparticles is plotted in Fig. 17. The lithium manganese oxide nanoparticles are suitable materials for the formation of secondary batteries.